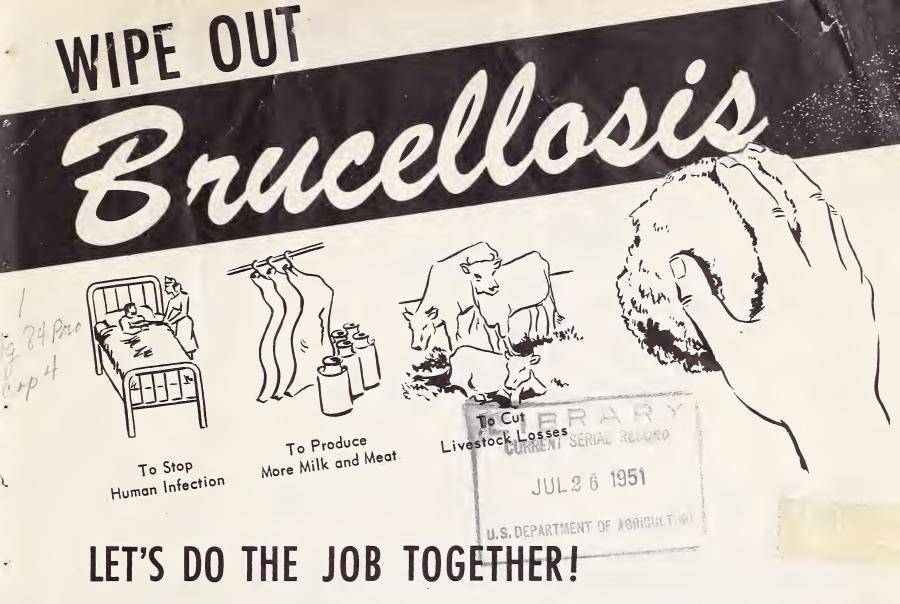
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.





By working together with proved methods, we can whip brucellosis in animals and man. But it's no short or simple job.

By working together we have virtually eliminated the cattle fever tick and tuberculosis. But we must be ready and well organized if we are to have equal success with brucellosis.

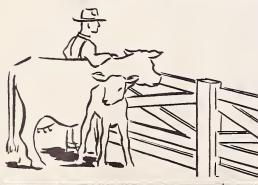
Through cooperative research, the scientific know-how has been strengthened. To form the basis for more effective control, we have more accurate ways of diagnosing the disease in animals and man. The choice of a control plan depends upon individual herd conditions and the severity and extent of brucellosis in the herd or community. Success rests on our willingness and ability to use the tools that research has provided, rather than to wait for better methods.

Fortunately, more has been accomplished in organization during the past year than in any similar period since eradication of this disease was begun on a national scale about 15 years ago.

We now have the National Brucellosis Committee ready for action. The Extension Service is primarily responsible for carrying out the necessary educational work with stockmen. For practical measures to

rid our herds of brucellosis, we rely upon the U.S. Livestock Sanitary Association and the Bureau of Animal Industry, cooperating with State authorities.

For lasting results, brucellosis eradication must be done on an area, regional and national basis, and have the support of the whole livestock industry. We must either goforward or fall behind. There is no standing still.





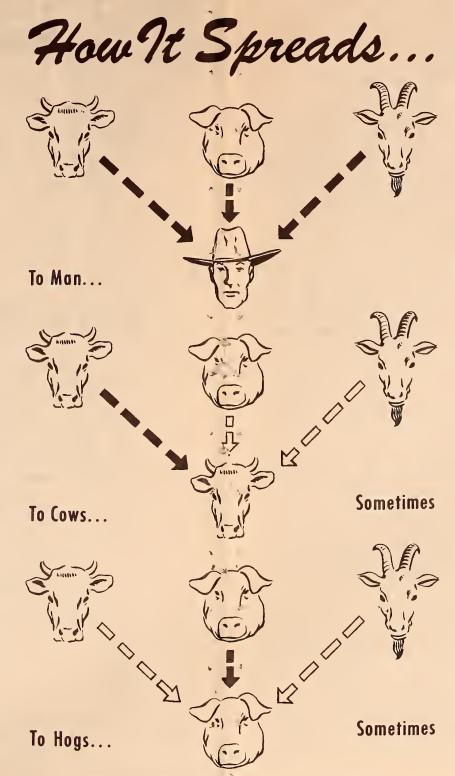
WHAT IT IS...

Brucellosis is an infectious disease that affects domestic animals and sometimes human beings. It is named after Sir David Bruce, who first found it in the milk of infected goats on the Isle of Malta, following a widespread human epidemic. It is world-wide in distribution and a threat to public welfare. In man the disease is called human brucellosis, undulant fever or Malta fever.

Brucellosis still persists in about 20 percent of our herds and 5 percent of our cattle--although we have reduced it considerably by cooperative, organized methods since 1934. In cattle it is known as bovine brucellosis, Bang's disease or contagious abortion. Many hogs and goats also have the disease, and it is found to a much less degree in sheep, horses and dogs. The three known types of the germ that causes it are called <u>Brucella abortus</u> in cattle, <u>Brucella suis</u> in swine, and <u>Brucella melitensis</u> in goats.

Each type may infect certain other animals, and man is the victim of all three types. In humans, the goat and swine types are generally the most severe, but the cattle type is the most common. Since 1905, when the first authentic case of undulant fever was found in the United States, the number of reported cases has averaged about 7,000 annually. Rarely, if ever, does one person get the infection from another person. Therefore, eradication of the disease in animals will eliminate it entirely in man.

Brucellosis in livestock can be eradicated by using proper methods long proved to be practical, but no cure has as yet been perfected. Progress in the treatment of the human type is being made with antibiotic drugs.





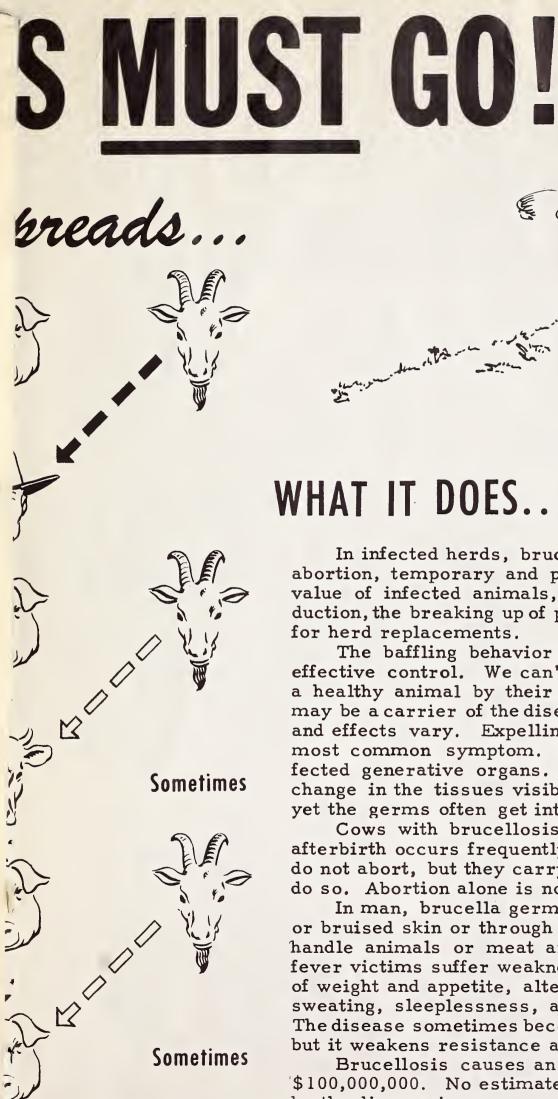
In infected herds, brucellosis causes loss of calves by abortion, temporary and permanent sterility, lower sales value of infected animals, decreased milk and meat production, the breaking up of purebred lines, and greater costs for herd replacements.

The baffling behavior of the disease is an obstacle to effective control. We can't as a rule tell an infected from a healthy animal by their general appearance, yet the one may be a carrier of the disease in virulent form. Symptoms and effects vary. Expelling a premature, dead fetus is the most common symptom. The disease centers in the infected generative organs. Usually the disease causes no change in the tissues visible on post-mortem examination, yet the germs often get into the joints and cause arthritis.

Cows with brucellosis often fail to breed. Retained afterbirth occurs frequently. Many infected cows and sows do not abort, but they carry the disease to others that may do so. Abortion alone is no sure sign of the disease.

In man, brucella germs enter the body through the cut or bruised skin or through the digestive tract. Persons who handle animals or meat are most apt to get it. Undulant fever victims suffer weakness, headache, painful joints, loss of weight and appetite, alternating chills and fever, profuse sweating, sleeplessness, and numbness of the extremities. The disease sometimes becomes chronic. It is seldom fatal, but it weakens resistance against other diseases.

Brucellosis causes an annual livestock loss of at least \$100,000,000. No estimate can be made of the loss caused by the disease in man.





WHAT IT DOES...

In infected herds, brucellosis causes loss of calves by abortion, temporary and permanent sterility, lower sales value of infected animals, decreased milk and meat production, the breaking up of purebred lines, and greater costs for herd replacements.

The baffling behavior of the disease is an obstacle to effective control. We can't as a rule tell an infected from a healthy animal by their general appearance, yet the one may be a carrier of the disease in virulent form. Symptoms, and effects vary. Expelling a premature, dead fetus is the most common symptom. The disease centers in the infected generative organs. Usually the disease causes no change in the tissues visible on post-mortem examination, yet the germs often get into the joints and cause arthritis.

Cows with brucellosis often fail to breed. Retained afterbirth occurs frequently. Many infected cows and sows do not abort, but they carry the disease to others that may do so. Abortion alone is no sure sign of the disease.

In man, brucella germs enter the body through the cut or bruised skin or through the digestive tract. Persons who handle animals or meat are most apt to get it. Undulant fever victims suffer weakness, headache, painful joints, loss of weight and appetite, alternating chills and fever, profuse sweating, sleeplessness, and numbness of the extremities. The disease sometimes becomes chronic. It is seldomfatal, but it weakens resistance against other diseases.

Brucellosis causes an annual livestock loss of at least \$100,000,000. No estimate can be made of the loss caused by the disease in man.

BRUCELLOSIS WILL GO!









if and when...

Stockmen have the blood serum agglutination test made to detect infected animals. They have their 6 to 8 months old calves injected with strain 19 standardized live Brucella vaccine to develop resistance against the disease. They keep their premises clean and add only healthy animals to their herds. In addition, they adopt one of the following plans, recommended by the U.S. Livestock Sanitary Association and the Bureau of Animal Industry, U.S. Department of Agriculture:

<u>Plan A.--</u>Use herd test and slaughter of reactors--with or without calfhood vaccination. This has advantage of being a short-time program for lightly infected herds which may be cleaned, and kept clean after limited testing. Calfhood vaccination is advisable in clean herds surrounded by heavily infected ones. This plan calls for prompt removal of reactors, thorough disinfection and retests at 30-day intervals.

Plan B.--Test the herd, vaccinate the calves and retain the reactors until they can be sold for slaughter without heavy loss to the owner. Get rid of reactors reasonably soon, leaving in the herd vaccinated, growing heifers with increased resistance.

Plan C.--Vaccinate calves without testing the herd. This plan is suited to range herds or those in which the movement of animals is governed by special permits issued by State livestock sanitary officials.

Plan D.--Vaccinating adult cattle. To be used only upon approval in writing by State-Federal supervisors before vaccination begins. It should be used only as an emergency measure in herds where danger of spreading infection is very great.

Handy Helps. -- A small folder for herd owners, by U. S. Bureau of Animal Industry; a handy size portable display for local use through Extension Service; current radio fill-ins.

<u>Printed references.</u>—What We Know About Brucellosis, issued by U. S. Livestock Sanitary Association, Dr. R. A. Hendershott, Trenton, N. J.; U. S. Department of Agriculture, Farmers' Bulletin 1871, Brucellosis in Cattle; Circular 781, Brucellosis in Swine; Publications by State Agricultural Experiment Stations.